

Name _____
Secret of Photo 51 Video Worksheet

Date _____
Living Environment: 2004-2005

Directions: Answer the following questions as you view the Nova video entitled “Secret of Photo 51”. Ask your instructor to pause the program if you get terribly behind, but not after each question you might miss. You may also complete the photo quiz of this program at your instructor’s discretion.

1. Who were the two leading DNA scientists in this field? [introduction of the video]
2. What was Rosalind Franklin trying to do at the same time as Watson and Crick?
3. What year did Watson and Crick receive the Nobel Prize?
4. What is the title of James Watson’s book?
5. Why wasn’t Franklin able to defend herself as portrayed in Watson’s book?
6. What year and where was Rosalind Franklin born?
7. What was the Franklin family “doing” as the Nazi party came to power?
8. What school (college) did Rosalind Franklin attend?
9. What is x-ray crystallography?
10. What were Rosalind’s first experiments concerned with and how did they contribute to the war effort?
11. Where did Rosalind work when she later moved to Paris and what did she perfect when she worked there?

12. What often forced Rosalind to suspend her work for weeks at a time?
13. Where in England was Rosalind offered a position?
14. What was her main assignment when Rosalind started there in 1951?
15. Who was in charge of Rosalind in the lab?
16. (BONUS): Where did the assistant (Mrs. Heller) graduate from in the letter Aaron Klug speaks of?
17. Who “enters the game” while setting up the lab at Kings?
18. Where does Watson end up getting a position?
19. Who was Watson’s office mate?
20. What nickname was Rosalind given that Watson later “popularizes”?
21. How many forms of DNA does Rosalind initially photograph?
22. How do Watson and Crick propose to demonstrate DNA structure?
23. Who do Watson and Crick “acquire” Franklin’s unpublished data?

24. What does Franklin finally name her best “B form” picture?
25. What new nickname does she acquire after this?
26. How many angstroms per “turn” is the DNA molecule?
27. What is the name of the pub that Watson and Crick declare that they have found the “secret of life” in?
28. What was the general theme of her work after leaving King’s?
29. What is she later diagnosed with and what is the probable cause?
30. Social question: What is significant about Franklin’s upbringing and religion when she “started” her science career versus when she completed her science career?

Comparison of a “Modern” View and Photo 51

